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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,085	07/20/2001	Kenneth B. Higgins	5113A	2412

7590

04/09/2003

Milliken & Company  
P.O. Box 1927  
Spartanburg, SC 29304

EXAMINER
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JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
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1771

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DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/910,085

Applicant(s)

HIGGINS ET AL.

Examiner

Cheryl Juska

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-142 is/are pending in the application.
- 4a) Of the above claim(s) 86, 126, 130, 134, 136 and 139-141 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-85, 87-125, 127-129, 131-133, 135, 137, 138, and 142 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 5, 9. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group I, claims 1-85, 87-125, 127-129, 131-133, 135, 137, 138, and 142 in Paper No. 8 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 86, 126, 130, 134, 136, and 139-141 are withdrawn as being non-elected.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 41, and 50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 1, 41, and 50 are indefinite for the use of the phrase "such as." Said phrase renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4, 7-17, 19-25, 27-42, 44-48, 50-60, 62-67, 69-73, 75-80, 87-125, 127-129, 131-133, 135, 137, 138, and 142 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,522,857 issued to HIGGINS in view of US 5,610,207 issued to DE SIMONE et al.

HIGGINS teaches a carpet or carpet tile comprising a tufted or bonded primary carpet, an adhesive layer having a reinforcing layer embedded therein, and a polyurethane foam cushion backing (col. 1, lines 5-7 and lines 26-33 and col. 2, lines 1-6). The primary carpet backing may also have a pre-coat latex, urethane, PVC, or acrylic (i.e., hot melt adhesive) layer (col. 1, lines 44-47). The adhesive layer may be a polyolefin or other thermoplastic hot melt material and is present in an amount ranging from 10-70 oz/yd<sup>2</sup> (col. 1, lines 48-52). The reinforcing layer may be a fiberglass scrim or a woven or nonwoven material made of polyester, nylon, or polypropylene (col. 1, lines 52-55). The foam layer may be 2.54-25.4 mm thick with a density of about 10-60 oz/yd<sup>2</sup> (col. 2, lines 1-6).

Thus, HIGGINS teaches the present invention with the exception that the foam layer is a rebond foam layer. However, rebond foam carpet backings are known in the art as is evidenced by DE SIMONE. DE SIMONE teaches a rebond polyurethane foam product which is suited for a carpet backing (abstract and col. 2, lines 34-45). The rebond foam is made from recycled scrap or waste polyurethane foam that is reduced to particles of 0.5 to 5 mm in size (col. 2, line 65-col. 3, line 21). The foam particles are mixed with a liquid polyurethane binder, consolidated under pressure, and cured to bond the foam particles together (col. 1, line 62-col. 2, line 3). The binder is present in the range of 10-40% by weight (col. 5, lines 61-67) and may contain additives such

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as a catalysts, fire retardants, viscosity modifiers, and heat and light stabilizers (col. 4, lines 61-65).

Thus, it would have been obvious to one skilled in the art to substitute a rebond foam layer, as taught by DE SIMONE, for the foam layer of HIGGINS. Motivation to do so would be the advantages of said rebond foam, such as good cushioning properties at low cost (i.e., recycled material).

With respect to the open cell foam limitations of claims 95, 96, 105, and 135, it is argued that said limitations are obvious over the prior art even though said prior art does not explicitly teach open cell foams. Specifically, it would have been obvious for one skilled in the art to choose an open cell foam for the rebond foam of DE SIMONE since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. Therefore, said claims are rejected as being obvious over the cited prior art.

8. Claims 5, 6, 18, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited HIGGINS and DE SIMONE patents as set forth above, and in further view of EP 048 986 issued to DOW.

HIGGINS is silent about the face weight of the primary carpet base. However, the presently claimed face weight of 12-60 oz/yd<sup>2</sup> is well known in the art. For example, DOW '986 teaches a polyurethane foam backed carpet having a nylon pile face weight of 14 oz/yd<sup>2</sup> (page 11, lines 22-30). Thus, it would have been obvious to one skilled in the art to employ a face weight according to DOW in the carpet of HIGGINS, with the expectation of producing a suitable carpet face. Therefore, claims 5, 6, 18, and 43 are obvious over the prior art.

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9. Claims 26, 49, and 81-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited HIGGINS '857 and DE SIMONE patents as set forth above, and in further view of US 5,540,968 issued to HIGGINS.

HIGGINS '857 and DE SIMONE do not teach a nonwoven backing material adhered to the foam cushion. However, said backings are well known as evidenced by HIGGINS '968. The backing is a stabilizing needlepunched nonwoven material of polyester and polypropylene fibers (col. 2, lines 40-44). The nonwoven backing is applied to the carpet substrate via a polymeric adhesive (i.e., polyurethane forming composition). Additionally, HIGGINS '968 teaches an alternate embodiment of an adhesive quick release backing (col. 6, lines 55-64). Thus, it would have been obvious to one skilled in the art to add a nonwoven backing material, as taught by HIGGINS '968, to the carpet produced by the combination of HIGGINS '857 and DE SIMONE. Motivation to do so would be to enhance the dimensional stability of said carpet. Therefore, claims 26, 49, and 81-85 are obvious over the prior art.

10. Claims 61, 68, and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited HIGGINS and DE SIMONE patents as set forth above, and in further view of US 5,616,200 issued to HAMILTON.

HIGGINS '857 and DE SIMONE are silent with respect to the use of bitumen layer an adhesive layer of a carpet tile. However, said use is well-known in the art. For example, HAMILTON teaches adhesive layers may include vinyl resins, thermoplastic hot melts, bitumen, or modified bitumen (col. 4, lines 30-34). Thus, it would have been obvious to substitute a bitumen backing for the backing of HIGGINS '857 since selection of any art recognized equivalent would be within the level or ordinary skill in the art. Therefore, claims 61, 68, and 74

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are obvious over the prior art.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



CHERYL A. JUSKA  
PRIMARY EXAMINER

cj  
April 6, 2003